DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026687 Address: 333 Burma Road **Date Inspected:** 11-Nov-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Jobsite

CWI Name: CWI Present: Yes No As noted below **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: SAS OBG**

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

- 1. 14W/PP128/W4 Lifting Lug Hole W4 (Exterior)
- 14W/PP128/W3 Lifting Lug Holes W1 and W2 (Exterior)
- 3. 12E/13E Longitudinal Stiffener LS/5 (Interior)
- 14W/PP128/W4 Lifting Lug Hole W4 (Exterior)

This QA Inspector made random observations of ABF welder Jorge Lopez (ID 6149) perform the Shielded Metal Arc Welding process (SMAW) in the 1G flat position on Lifting Lug Hole (LLH) 14W PP128 W4-W4. This QA Inspector observed QC Inspector Sal Merino measure the pre-heat temperature to verify a minimum of 10°C was achieved. This QA Inspector also observed the QC Inspector monitoring the welding and verifying that the parameters were in compliance pertaining to ABF-WPS-D15-1050A-CU. The parameters were recorded as (Amperes=195) utilizing a 4.0 mm E7018-H4R electrode. During in process welding, this QA Inspector noted that the QC Inspector measured the inter-pass temperatures to maintain a heat range below 230°C. At approximately 1000 hours, ABF Welding Supervisor Eric Sparks canceled welding operations at this location due to inclement weather.

14W/PP128/W3 Lifting Lug Hole W1 (Exterior)

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This QA Inspector randomly observed ABF welder Mike Jimenez (ID 4671) performing the Shielded Metal Arc Welding (SMAW) process in the (1G) flat position on "A" deck lifting lug hole 14W /PP128/W4/W1. This QA Inspector observed QC Inspector Sal Merino verify that the preheat temperature was at the minimum of 10 degrees C and that the welding parameters (Amps=270) were in accordance with ABF-WPS-D15-1050A-CU. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was completed on this date and appeared to be in general compliance with the approved WPS and the contract specifications.

This QA Inspector Observed QC Inspector Sal Merino perform joint fit-up operations on Lifting Lug Hole (LLH) 14W/PP128/W3/W2 on the exterior of the OBG. This QA Inspector verified the BU-4a complete Joint penetration (CJP) fit-up and found it to be satisfactory and in conformance with the welding procedure as mentioned above. This QA Inspector randomly observed ABF welder Mike Jimenez (ID 4671) perform the SMAW process in the 1G flat position with QC Inspector Sal Merino monitoring inter-pass temperatures and welding parameters to ensure compliance with the approved WPS and the contract specifications. At approximately 1000 hours, ABF Welding Supervisor Eric Sparks canceled welding operations at this location due to inclement weather.

12E/13E Longitudinal Stiffener LS/5 (Interior)

This QA Inspector randomly observed ABF Quality Control Inspector John Pagliero performing Magnetic Particle (MT) inspection on the back gouge of face "B" of longitudinal stiffener (LS) 5 located at 12E/13E on the interior of the OBG. The weld length of LS/5 is 230 mm long and this QA Inspector verified that the weld was free of indications and found to be satisfactory. This QA Inspector observed the QC Inspector measure the pre-heat of face "A" and this QA Inspector noted the utilization of E9018-H4R electrodes with Amperage of 130. This QA Inspector randomly observed ABF welder Fred Kaddu (ID 2188) perform the SMAW process in the 3G vertical position and made subsequent observations throughout the shift to monitor quality and noted that the work was in progress and appeared to be in general compliance with the approved WPS and the contract specifications.

This QA Inspector performed a progress survey of the exterior and interior OBG deck, side, bottom and edge plate splices at 12W/13W as directed by QA Lead Inspector, Daniel Reyes.

The QAI reviewed the observations and inspection with QA Lead Inspector, Daniel Reyes, written in this report. No issues were noted by the QAI and the QA Lead Inspector concurs with the QA report.

Summary of Conversations:

There were no significant conversations to report on this date.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Frey,Doug **Quality Assurance Inspector** Levell,Bill **Reviewed By: QA** Reviewer